Complete Listing of Claims Pursuant to 37 C.F.R. §1.121

Pursuant to 37 C.F.R. §1.121 the following is a complete listing of the claims of the present application. In this set of claims, please amend claims 71, 75, and cancel claims 81-89 and 115 as follows. With the amendments and cancellation to the aforementioned claims, the following listing of claims will replace all prior versions, and listings, of claims in the application:

1-70 (Canceled)

71. (Currently amended) A composition which comprises a therapeutically effective amount of an isolated stem cell factor (SCF) polypeptide, or a biologically active SCF fragment comprising at least 130 contiguous amino acids of any of sequences set forth in SEQ ID NO:46, SEQ ID NO:61 or SEQ ID NO:63 that ~~possesses an activity associated with SCF~~ enhances hematopoiesis and one or more cytokines in a pharmaceutically acceptable carrier.

72. (Previously presented) The composition of claim 71, wherein SCF polypeptide is a product of a recombinant prokaryote cell or eukaryote cells.

73. (Previously presented) The composition of claim 72, wherein the SCF polypeptide is a human SCF polypeptide.

74. (Previously presented) The composition of claim 73, wherein the SCF polypeptide is selected from the group of polypeptides consisting of the amino acid sequence set out as 1-162, 1-164 and 1-165 as set out in Figure 15C, said polypeptides optionally consisting of an N-terminal methionine.

75. (Currently amended) The composition of claim 73, wherein the SCF polypeptide is a polypeptide which comprises a polypeptide sequence selected from the group ~~of polypeptides~~ consisting of the amino acid sequence set out as ~~1-100, 1-110, 1-120, 1-123, 1-127,~~ 1-130, 1-133, 1-137, 1-141, 1-145, 1-148, 1-152, 1-156, 1-157, 1-158, 1-159, 1-160, 1-161, 1-163, 1-166, 1-168, 1-173, 1-178, 2-164, 2-165, 5-164, 11-164, 1-180, 1-183, 1-185,

1-188, 1-189, 1-220 and 1-248 as set out in Figures 42A-C, said polypeptide optionally consisting of an N-terminal methionine.

76. (Previously presented) The composition of claim 73, wherein the SCF polypeptide is selected from the group consisting of amino acids 1-152, 1-157, 1-160, 1-161 and 1-220 as set out in Figures 44A-C, said polypeptide optionally consisting of N-terminal methionine.

77. (Previously presented) The method of claims 74, 75, or 76, wherein the stem cell factor is covalently conjugated to a water-soluble polymer.

78. (Previously presented) The method of claim 77, wherein the water soluble polymer is polyethylene glycol.

79. (Previously presented) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat hematopoietic disorders.

80. (Previously presented) The composition of claim 77, wherein the amount of SCF in the composition is effective to treat hematopoietic disorders.

81. (Canceled) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat epithelial cell disorders.

82. (Canceled) The composition of claim 77 wherein the amount of SCF in the composition is effective to treat epithelial cell disorders.

83. (Canceled) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat stromal cell disorders.

84. (Canceled) The composition of claim 77, wherein the amount of SCF in the composition is effective to treat stromal cell disorders.

85. (Canceled) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat neural disorders.

86. (Canceled) The composition of claim 77, wherein the amount of SCF in the composition is effective to treat neural disorders.

87. (Canceled) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat pigmentation disorders.

88. (Canceled) The composition of claim 77, wherein the amount of SCF in the composition is effective to treat pigmentation disorders.

89. (Canceled) The composition of claim 74, 75, or 76, wherein the amount of SCF in the composition is effective to treat germ cell disorders.

90. (Canceled) The composition of claim 77, wherein the amount of SCF in the composition is effective to treat germ cell disorders.

91. (Previously presented) The composition of claim 79, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

92. (Previously presented) The composition of claim 80, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage

Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

93. (Previously presented) The composition of claim 81, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

94. (Previously presented) The composition of claim 82, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

95. (Previously presented) The composition of claim 83, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

96. (Previously presented) The composition of claim 84, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage

Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

97. (Previously presented) The composition of claim 85, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

98. (Previously presented) The composition of claim 86, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

99. (Previously presented) The composition of claim 87, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

100. (Previously presented) The composition of claim 88, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage

Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

101. (Previously presented) The composition of claim 89, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

102. (Previously presented) The composition of claim 90, wherein the composition contains at least one cytokine selected from the group consisting of Interleukin-1, Interleukin-2, Interleukin-3, Interleukin-4, Interleukin-5, Interleukin-6, Interleukin-7, Interleukin-8, Interleukin-9, Interleukin-10, Interleukin-11, Interleukin-12, erythropoietin, Granulocyte Colony-stimulating Growth Factor, Granulocyte-Macrophage Colony-Stimulating Factor, Colony Stimulating Factor-1, Insulin-like Growth Factor-1, and Leukemic Inhibitory Factor.

103. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for the controlled release of SCF and other cytokines in the composition.

104. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for the controlled release of SCF and other cytokines in the composition.

105. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for parenteral delivery of the composition.

106. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for parenteral delivery of the composition.

107. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for pulmonary delivery of the composition.

108. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for pulmonary delivery of the composition.

109. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for nasal delivery of the composition.

110. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for nasal delivery of the composition.

111. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for the oral delivery of the composition.

112. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for the oral delivery of the composition.

113. (Previously presented) The composition of claim 74, 75, or 76, wherein the composition contains a pharmaceutically effective carrier for the topical delivery of the composition.

114. (Previously presented) The composition of claim 77, wherein the composition contains a pharmaceutically effective carrier for the topical delivery of the composition.

115. (canceled) A composition which comprises a therapeutically effective amount of an analog of stem cell factor (SCF) polypeptide of any of sequences set forth in SEQ ID NO:46, SEQ ID NO:61 or SEQ ID NO:63 that possesses an activity associated with SCF and one or more cytokines in a pharmaceutically acceptable carrier.